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Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patent Application of:

Madhu Rao et al.

Application No.: 09/921,936

Filed: August 2, 2001

For: NEIGHBOR DISCOVERY USING
ADDRESS REGISTRATION
PROTOCOL OVER ELMI

Examiner: Survillo, Oleg

Art unit: 2142

Confirmation No.: 8366

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF MADHU RAO UNDER 37 C.F.R. §1.132

I, Madhu Rao, declare as follows:

1. I am one of the inventors of the above-identified patent application that has been assigned to Cisco Technology, Inc. I have been employed by Cisco Systems, Inc. of San Jose, California from May 25, 1999 through the present. Cisco Systems, Inc. is the parent corporation of Cisco Technology, Inc.

2. The claims of this application have been attached as Exhibit A. I have reviewed the invention of this application set forth as the claims. Prior to December 6, 2000, Srikanthkumar Hosakote and I conceived of the invention, and that invention is set forth in the claims of Exhibit A.

3. The declaration is made herein to establish derivation from the inventors of this application of anything disclosed in the cited publication, "Cisco Publication: Frame Relay ELMI Address Registration" by Cisco, posted on December 6, 2000 (hereinafter "Cisco Document") that relates to the claims of this application rather than being invented by the author of the Cisco Document which has been attached as Exhibit B. For example, the ELMI address registration feature described on pages 2 and 3 of the Cisco Document relates to the address registration information found in all of the independent claims of this application. The ELMI address registration feature has been derived from the inventors of this application.

4. The documentation process to generate configuration and product guides (e.g., Cisco Document) at Cisco Technology, Inc is as follows. Inventors provide functional and design specifications for a product to documentation writers. Based on the functional and design specifications, the documentation writers generate the configuration and product guides. Engineering teams that include the inventors review and approve these configuration and product guides. These configuration and product guides are then published and provided to customers.

5. Exhibit C is an ELMI Protocol Document entitled "IP Address/ IfIndex Registration Using ELMI protocol on the UFM Card" (hereinafter "ELMI Protocol Document"). The relevant dates have been redacted from Exhibit C. I authored the ELMI Protocol Document. Srikanthkumar Hosakote and I invented the subject matter of the ELMI Protocol Document that relates to the claims of this application.

6. Srikanthkumar Hosakote and I provided the ELMI Protocol Document to the documentation writers at Cisco Systems, Inc. Upon information and belief, Max

Anderson was the documentation person who authored the Cisco Document, Exhibit B, per page 7 of the ELMI-Address registration Program Plan (EDCS-49176) which has been attached as Exhibit D. The relevant dates have been redacted from Exhibit D. Max Anderson is not currently employed at Cisco Systems, Inc.

7. I hereby declare that the subject matter of the Cisco Document that is related to the claims of this application was derived from the ELMI Protocol Document that was provided to Max Anderson. Max Anderson did not invent the subject matter of the Cisco Document. Subject matter of the Cisco Document that is not related to the claims of this application was derived from other source(s) provided to Max Anderson. The subject matter of the Cisco Document that is related to the claims of this application should be attributed to the inventors of this application -- namely, Srikanthkumar Hosakote and myself.

8. The subject matter of the above-referenced application and claims is based on the ELMI Protocol Document which was prepared and dated prior to December 6, 2000. Figure 1 of the ELMI Protocol Document illustrates a wide area network management system to manage and configure a network of switches (e.g., lgx1-3, lgx4-6). Figure 1 also illustrates a local area network management system to manage and configure a network of routers (e.g., routers 1-3). Page 6 describes the discovery (mapping) of the router and WAN networks using address information (e.g., IP address, IfIndex information) in support of claims 13-16, 18-21, 34-37, 50-53, and 81. Page 8 and section 4.3 of the ELMI Protocol Document describe how the ELMI messages sent between devices (e.g., switches, routers) is enhanced with the address registration information (e.g., IP address, interface index). The figure at the top of page

8 illustrates a switch sending the ELMI message with the address information appended to the message to a router and vice versa. Pages 5-8 and Figure 1 of the ELMI Protocol Document provide support for claims 1, 2, 5, 7-9, 17, 22, 23, 27-29, 33, 38, 39, 43-45, 49, 54, 55, 59-61, 65, 66, 69, 71, 73, 74, 77, 79, and 81. Pages 11-14 disclose the interface index including port and slot numbers. For example, section 5.1.2 describes the incoming ELMI message being parsed and the router side IfIndex being updated internally in the port table for each port. Section 5.1.3 describes the UFM side IfIndex (interface index) being calculated based on the slot number and port number. Section 5.1.2 illustrates 6 reserved bytes (spare bytes) included as part of the address information. Pages 11-14 provide support for claims 3, 4, 6, 24-26, 40-42, 56-58, 67, 68, 70, 75, 76, and 78. Page 15 describes messages being sent with address information (e.g., IP address, IfIndex) during configuration changes. Page 10 describes the frequency (regular interval) of exchange for ELMI messages between routers and the UFM. Pages 10 and 15 provide support for claims 10-12, 30-32, 46-48, 62-64, 72, and 80. The ELMI Protocol Document provides support for the claims of the above-referenced application.

9. Attached as Exhibit E is an Invention Disclosure Document entitled "Neighbor Discovery Using Address Registration protocol running over ELMI" (hereinafter "Invention Disclosure Document") describing embodiments of the claimed invention. The relevant dates have been redacted from Exhibit E. The Invention Disclosure Document discusses advantages of implementing the ELMI-AR protocol on the UFM frame relay card and neighbor Cisco IOS. The Invention Disclosure Document

further discusses how Cisco products that provide network management solutions will use the ELM-AR feature to provide complete network discovery.

10. I hereby declare that my invention was conceived prior to December 6, 2000. The Invention Disclosure Document was completed prior to December 6, 2000, and submitted to the Legal Department of Cisco Technology, Inc. Exhibit E demonstrates that the claimed invention was conceived prior to December 6, 2000.

11. The acts described herein which are relied upon to establish invention of the claimed subject matter were carried out in the United States of America, a NAFTA country, or a WTO country.

12. I declare, to the best of my knowledge, that all statements made in this document are true, and that all statements made on the information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-identified patent application or any patent issued thereon.

Dated: 2-18-2008


Name: Madhu Rao